

October 12, 2010

Mr. Gerardo Rios – via email (R9AirPermits\_sc@epa.gov)
U.S. EPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105

Dear Mr. Rios:

Subject:

Providence St. Joseph Medical Center (ID 08220) - Title V Permit

Revision

Providence St. Joseph Medical Center has proposed to revise their Title V permit by replacing a burner on an existing boiler with a low NOx burner. This facility is a hospital (SIC 8060) located at 501 S. Buena Vista Street, Burbank, CA 91505. This proposed permit revision is considered as a "de minimis significant permit revision" to their Title V permit. Attached for your review are the evaluation and permit for the proposed revision.

If you have any questions or need additional information regarding the proposed permit revision, please call Francisco Escobar at (909) 396-2503.

Very truly yours,

Brian L. Yeh

Senior Manager

General Commercial and Energy Team

Engineering and Compliance

BLY:FLE:Cover Letter 08220

Attachments



#### **ENGINEERING AND COMPLIANCE**

#### 

#### APPLICATION PROCESSING AND CALCULATIONS

#### TITLE V FACILITY PERMIT / PERMIT RENEWAL

Applicant's Name:

PROVIDENCE ST. JOSEPH MEDICAL CENTER

(FACILITY ID # 8220)

Mailing Address:

501 S. BUENA VISTA ST., BURBANK, CA 91505

**Equipment Location:** 

SAME

#### **BACKGROUND:**

Providence Saint Joseph Medical Center (PSJMC) has 431 licensed beds, provides a full range of diagnostic, treatment, care and support and is the second-largest hospital serving the San Fernando and Santa Clarita Valleys.

PSJMC is a Title V facility and they submitted the following applications:

Modification - 21.0 mmBTU/hr Boiler - Natural Gas / Propane fired.
 This is a Burner replacement to their Boiler # 1, a Low NOX burner (Ref. P/O D61542).

- A/N # 512274

2. Title V Permit Renewal

- A/N # 514425

3. Title V Permit Revision

- A/N #512416

**EQUIPMENT DESCRIPTION: - A/N 512274** 

BOILER, NO. 1, CLEAVER BROOKS, FIRE-TUBE TYPE, MODEL NO. CBW 700-500, SERIAL NO. B015530-91, 21,000,000 BTU PER HOUR, WITH A LOW NOX BURNER, S.T. JOHNSON COMPANY, MODEL NO. NOXMATIC A-TYPE-500, NATURAL GAS OR PROPANE FIRED, AND A 15-HP COMBUSTION AIR BLOWER, 25-HP FORCED FLUE GAS RECIRCULATION SYSTEM.

**PERMIT CONDITIONS:** 

- A/N 512274 - (See sample permit)

PROCESS DESCRIPTION:

- (See original Evaluation)

#### **EMISSIONS DUE TO COMBUSTION - CALCULATIONS:**

Since this is a burner replacement and the burner is being replaced with a low NOX burner, we need to recalculate NOX emissions.

1. Max. Operating Schedule - Boiler # 1:

24.0 hr/day 7 day/wk

7.60 lb/mmscf

52 week/yr

3,216.50 dscf/min

8,760 hr/yr

2. Burner rating - Boiler # 1:

21.000.000 BTU/Hr or 21.00 mmBTU/Hr

Exhaust Flow Rate = 21,000,000 BTU/hr x 9,190 dscf x 1 hr\_

1,000,000 BTU 60 m

= 3,216.50 dscf x 60 min = 192,990.00 ft<sup>3</sup>/hr

The following AQMD Default Emission Factors will be used:

1. ROG = 5.50 lb/mmscf

SOx = 0.60 lb/mmscf PM =

2. NOx =  $9 \text{ ppmv}^{1}$ 

CO = 200 ppmv '



#### **ENGINEERING AND COMPLIANCE**

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#### APPLICATION PROCESSING AND CALCULATIONS

#### **EMISSIONS CALCULATIONS (CONT' D):**

20,000.00 ft<sup>3</sup>/hr

1,000,000

1.200E-02 lb/hr x 8,760 hr/yr =

SOx

SOx

Table 1 - For External Combustion Equipment

Fuel Type (Fuel Unit)	Gases,	Nitrogen Oxides	Sulfur Oxides,	Carbon Monoxide,	Particulate Matter,
Not and October 19 of the Control	(lb/unit)	(lb/unit)	(lb/unit)	(lb/unit)	(lb/unit)
Natural Gas (mmscf) / Boilers Only	5.50	N/A <sup>2</sup>	0.60	N/A <sup>2</sup>	7.60
LPG, Propane, Butane - (1000 gal.)	0.26	N/A <sup>2</sup>	4.60	N/A <sup>2</sup>	0.28

Notes:

- 1. Rule 1146 requires that Group II boilers rated >2 and <75 MMBtu/hr meet 9 ppm NOx beginning 1/1/2012.
- 2. The applicant is replacing the burner to comply with NOX 9 ppm, per Rule 1146 before the 2012 deadline. Rule 1146 limits for CO = 400 ppm. This type of boiler has been known to meet 200 ppm. I will base my emissions on 200 ppm (conservative assumption).

Before Modification: Burner rating:	<b>21,000,000</b> BTU/Hr	NOx =	<u>I Gas</u> 30 ppmv	NOx	Propa =	<u>ine</u> 30 ppmv
After Modification: Burner rating:	<b>21,000,000</b> BTU/Hr	NOx =	9 ppmv	NOx	=	9 ppmv
<u>Natural Gas</u> Nat. gas	s requirement $=\frac{21,000}{1,000}$	,000 BTU/hr 050 BTU/ft <sup>3</sup>	$- = 20,000.00 \frac{ft^3}{hr}$			
ROG = 20,000.00 #	<sup>3</sup> /hr x 5.5 lb/# <sup>3</sup>	= 0.110 lb/	hr = 2.640 lb/day			
	x 8,760 hr/yr = 963.60	-				
30-day Ave: ROG	$S = \frac{0.110 \text{ lbs/hr}}{30 \text{ da}}$	30.0 <del>hr/month</del> ay/ <del>month</del>	2.677 lb/day			
NOx = 21,000,000 B	TU/hr x <u>8,710 ds</u> 1,000,000 B	<u>scf</u> = 182, <del>TU</del>	910.00 dscf/hr			
NOx = 182,910.00 d	sef/hr x <u>9 ppm</u> x	(20.9 )	x 46 lb/ <del>lb-mole</del> 385 sef/lb-mole			
NOx = 0.230 lb/hr =	= 5.512 lb/day = 2	,011.75 lb/yr				
30-day Ave: NOx	$= \frac{0.230 \text{ lbs/hr}}{30 \text{ ds}}$	30.0 <del>hr/month</del> ay/ <del>month</del>	- = <sup>5.588</sup> lb/day			

1.200E-02 lb/hr

105.12 lb/yr

= 0.288 lb/day

### AOMD

#### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

#### **ENGINEERING AND COMPLIANCE**

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#### APPLICATION PROCESSING AND CALCULATIONS

#### **EMISSIONS CALCULATIONS (CONT' D):**

30-day Ave: 
$$SOx = \frac{0.012 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{0.292 \text{ lb/day}}{30 \text{ day/month}}$$

$$CO = 21,000,000 \frac{BTU}{hr} \times \frac{8,710 \frac{dscf}{1,000,000} = 182,910.00 \frac{dscf}{hr}$$

CO = 
$$182,910.00 \frac{\text{dsef/hr}}{1,000,000} \times \frac{200 \text{ ppm}}{1,000,000} \times \frac{(20.9)}{(20.9-3.0)} \times \frac{28 \frac{\text{lb/lb-mole}}{385 \text{ sef/lb-mole}}}{385 \text{ sef/lb-mole}}$$

$$CO = 3.11 \text{ lb/hr} = 74.554 \text{ lb/day} = 27,212.10 \text{ lb/yr}$$

30-day Ave: 
$$CO = \frac{3.106 \text{ lbs/hf}}{30 \text{ day/month}} = \frac{75.589 \text{ lb/day}}{75.589 \text{ lb/day}}$$

PM = 
$$20,000.00 \, \text{ft}^3/\text{hr} \times \frac{7.60}{1,000,000} \, \text{lb/ft}^3 = 0.152 \, \text{lb/hr} = 3.648 \, \text{lb/day}$$

$$PM = 0.152 \text{ lb/hr} \times 8,760 \text{ hr/yr} = 1,331.52 \text{ lb/yr}$$

30-day Ave: 
$$PM = \frac{0.152 \text{ lbs/hr}}{30 \text{ day/menth}} = \frac{3.699 \text{ lb/day}}{3.699 \text{ lb/day}}$$

ROG = 
$$192,990.00 \text{ ft}^3/\text{hr} \times \frac{0.26}{1,000,000} \text{ lb/ft}^3 = 0.050 \text{ lb/hr} = 1.204 \text{ lb/day}$$

$$ROG = 0.050 lb/hf \times 8,760 hf/yr = 439.55 lb/yr$$

30-day Ave: ROG = 
$$\frac{0.050 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{1.221 \text{ lb/day}}{30 \text{ day/month}}$$

NOx = 21,000,000 BTU/hr x 
$$9,190 \cdot dscf$$
 = 192,990.00 dscf/hr  $1,000,000 \cdot BTU$ 

NOx = 192,990.00 dsef/hr 
$$\times \frac{9 \text{ ppm}}{1.000.000} \times \frac{(20.9)}{(20.9 - 3.0)} \times \frac{46 \text{ lb/lb-mole}}{385 \text{ sef/lb-mole}}$$

$$NOx = 0.242 \text{ lb/hr} = 5.815 \text{ lb/day} = 2,122.62 \text{ lb/yr}$$

30-day Ave: NOx = 
$$\frac{0.242 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{5.896 \text{ lb/day}}{30 \text{ day/month}}$$

$$SOx = 20,000.00 \text{ ft}^3/\text{hr} \times \underbrace{4.60 \text{ lb/ft}^3}_{1.000.000} \text{lb/ft}^3 = 9.200\text{E-02 lb/hr} = 2.208 \text{ lb/day}$$

$$SOx = 9.200E-02 lb/hf x 8,760 hf/yr = 805.92 lb/yr$$



#### **ENGINEERING AND COMPLIANCE**

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#### APPLICATION PROCESSING AND CALCULATIONS

#### **EMISSIONS CALCULATIONS (CONT' D):**

30-day Ave: 
$$SOx = \frac{0.012 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{0.292 \text{ lb/day}}{30 \text{ day/month}}$$

CO = 21,000,000 BTU/hr x 
$$8,710$$
 dscf = 182,910.00 dscf/hr  $1,000,000$  BTU

CO = 192,990.00 dscf/hr 
$$\times \frac{200 \text{ ppm}}{1,000,000} \times \frac{(20.9)}{(20.9-3.0)} \times \frac{28 \text{ lb/lb-mole}}{385 \text{ scf/lb-mole}}$$

$$CO = 3.28 \text{ lb/hr} = 78.662 \text{ lb/day} = 28,711.74 \text{ lb/yr}$$

30-day Ave: 
$$CO = \frac{3.278 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{79.755 \text{ lb/day}}{79.755 \text{ lb/day}}$$

PM = 
$$192,990.00 \text{ ft}^3/\text{hr} \times \frac{0.28}{1.000.000} \text{ lb/ft}^3 = 0.054 \text{ lb/hr} = 1.297 \text{ lb/day}$$

$$PM = 0.054 \text{ lb/hf} \times 8,760 \text{ hf/yr} = 473.37 \text{ lb/yr}$$

30-day Ave: 
$$PM = \frac{0.152 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{3.699 \text{ lb/day}}{30 \text{ day/month}}$$

#### Before Modification: - (natural gas)

NOx = 21,000,000 BTU/hr x 
$$\frac{8,710 \text{ dscf}}{1,000,000 \text{ BTU}}$$
 = 182,910.00 dscf/hr

NOx = 
$$182,910.00 \frac{\text{dsef/hr}}{1,000,000} \times \frac{30 \text{ ppm}}{1,000,000} \times \frac{(20.9)}{(20.9 - 3.0)} \times \frac{46 \frac{\text{lb/lb-mole}}{385 \text{ sef/lb-mole}}}{385 \text{ sef/lb-mole}}$$

$$NOx = 0.766 \text{ lb/hr} = 18.372 \text{ lb/day} = 6,705.84 \text{ lb/yr}$$

30-day Ave: NOx = 
$$\frac{0.766 \text{ lbs/hr}}{30 \text{ day/month}} = \frac{18.627 \text{ lb/day}}{30 \text{ day/month}}$$

#### After Modification: - (natural gas)

$$NOx = 0.230 \text{ lb/hr} = 5.512 \text{ lb/day} = 2,011.75 \text{ lb/yr}$$
 30-day Ave:  $NOx = 5.588 \text{ lb/day}$ 

#### Change in emissions:

$$NOx = 0.766 \text{ lb/hr} - 0.230 \text{ lb/hr} = 0.536 \text{ lb/hr}$$

$$NOx = 18.372 \text{ lb/day} - 5.512 \text{ lb/day} = 12.861 \text{ lb/day}$$

#### HEALTH RISK ASSESSMENT - TIER - I & II ANALYSIS: - (N/A, See original evaluation)



#### **ENGINEERING AND COMPLIANCE**

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#### APPLICATION PROCESSING AND CALCULATIONS

**EMISSIONS SUMMARY:** - (Using Natural Gas)

A/N: 512274- Boiler # 1 (using natural gas)	HOURLY lb/hr	DAILY lb/day	30 DAY AVE lb/day	30 DAY NSR lb/day	ANNUAL lb/yr
R1 = R2 ROG	0.1100	2.64	2.677	3.00	
R1 = R2 NOx	0.2297	5.51	5.588	6.00	2,011.75
R1 = R2 SOx	0.0120	0.29	0.292	0.00	105.12
R1 = R2 CO	3.1064	74.55	75.589	76.00	27,212.10
R1 = R2 PM	0.1520	3.65	3.699	4.00	1,331.52

A/N: 512274- Boiler # 1 (using propane)	HOURLY lb/hr	DAILY lb/day	30 DAY AVE lb/day	30 DAY NSR lb/day	ANNUAL lb/yr
R1 = R2 ROG	0.0502	1.20	1.221	1.00	439.55
R1 = R2 NOx	0.2423	5.82	5.896	6.00	2,122.62
R1 = R2 SOx	0.0920	2.21	0.292	0.00	
R1 = R2 CO	3.2776	78.66	79.755	80.00	28,711.74
R1 = R2 PM	0.0540	1.30	3.699	4.00	473.37

		Current PTE			New PTE		
		HOURLY	DAILY	HOURLY	DAILY	Year	
		lbs./hr.	lbs./day	lbs./hr.	lbs./day	ton/yr	
R1 = R2	ROG	0.0525	1.26	0.0525	1.26		< 4 ton/y
R1 = R2	NOx	1.8150	43.559	1.2790	30.70	5.53	> 4 ton/y
R1 = R2	SOx	0.2737	6.568	0.2737	6.57		< 4 ton/y
R1 = R2	CO	0.1185	2.843	0.1185	2.84	0.51	< 29 ton/
R1 = R2	PM <sub>10</sub>	0.0743	1.784	0.0743	1.78	0.32	< 4 ton/y

With the exception of NOX, there is no change in emissions due to this burner modification on this boiler. There is a slight decrease in NOX emissions. The NSR emission entry will remain zero as was the case in the previous permit evaluation.

#### **RULES EVALUATION:**

Rule 212 Standards for Approving Permits - This equipment is in compliance with the following sections:

212(c)(1) - This equipment is not located within 1,000 ft from the outer boundary of a school.

212(c)(2) - Emissions from this equipment is below the daily threshold limits.

212(c)(3) - N/A, see original evaluation.

Rule 401 Visible Emissions - Compliance is expected from well maintained and properly operated equipment.

Rule 402 Public Nuisance - No nuisance is expected from well maintained equipment.

Rule 409 Combustion Contaminants - Compliance is expected.

Rule 431.1 Sulfur Content of Gaseous Fuels - The owner will buy gas from a gas utility company that must sell gas with less than 16 ppm of sulfur compounds (calculated as H<sub>2</sub>S). Compliance is expected with this rule.



#### **ENGINEERING AND COMPLIANCE**

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#### APPLICATION PROCESSING AND CALCULATIONS

#### **RULES EVALUATION (CONT' D):**

#### **Rule 1146**

Emissions of Oxides of Nitrogen From Industrial, Institutional, and Commercial Boilers, and Commercial Boilers, Steam Generators, and Process Heaters - Compliance with Rule 1146 concentration limits of 30 ppmv for NOx and 50 ppmv for CO is expected when firing with natural gas. This will be verified due to Source Test Requirements specified by this rule.

Please note: Rule 1146 requires that Group II boilers rated >2 and <75 MMBtu/hr meet 9 ppm NOx beginning 1/1/2012.

#### **Rule 1303**

(a)(1) - Best Available Control Technology (BACT) - Requirements for Boilers:

Due to this modifications, this firetube boiler now meets the 9 ppm NOx limit required by Rule 1146, January 1, 2012 deadline.

This boiler will be permitted and will be Source Tested to confirm compliance with both Rule 1146 and permit requirements.

1303(b)(1) - The calculated emissions from the operation of the boiler are below the limits allowed as specified in Appendix A, Table A-1 of this rule as shown below:

( Combustion Sources > 20 mmBTU/hr but < 30 mmBTU/hr)

	LIHITE .	Actual	Compliance	•
NOx	1.26 lbs/hr	0.2297 lbs/hr	Yes	Modeling is not Required
CO	69.30 lbs/hr	3.1064 lbs/hr	Yes	Modeling is not Required
$PM_{10}$	7.60 lbs/hr	0.1520 lbs/hr	Yes	Modeling is not Required

1303(b)(2)(A) - Offsets - The Boiler is exempt from offsets per Rule 1304(c)(5) - Regulatory Compliance for Essential Public Services.

#### Rule 1401 1

**Toxics and other Non-Criteria Pollutants -** A Tier II Health Risk Assessment was performed for the boiler, the results are shown below:

#### For the Boiler, the following are the results:

I used 1,000 feet, (304.8 meters) for both the residential and commercial site receptors:

Residential MICR =  $1.56 \times 10^{-8}$  which is under 1 in a million Commercial MICR =  $1.61 \times 10^{-9}$  which is under 1 in a million

The Hazard Index yielded the following:

Total HIA = 2.40E-06 which is under 1.0, Total for all Target Organs
Total HIC = 4.24E-04 which is under 1.0, Total for all Target Organs

#### **CONCLUSIONS AND RECOMMENDATIONS:**

I recommend that we proceed and issue the revision and Renewal concurrently to Providence Saint Joseph Medical Center's Title V Facility Permit, following a 45-day EPA review.

#### TIER 1 / TIER 2 SCREENING RISK ASSESSMENT DATA INPUT

Application deemed complete date: 09/18/10

A/N: 512274
Fac: Providence St. Joseph Med Center

Stack Data		Units
Hour/Day	24	hr/day
Day/Week	7	day/wk
Week/Year	52	wk/yr
Emission Units	lb/hr	
		0
Control Efficiency	0.00	fraction range 0-1
Does source have TBACT?	NO	
Point or Volume Source ?	P	P or V
Stack Height or Building Height	30	feet
Area (For Volume Source Only)		ft²
Distance-Residential	304.8	meters
Distance-Commercial	304.8	meters
Meteorological Station	В	urbank

Source Type:	В	- Boiler
Screening Mode (NO = Tier 1 or Tier 2; YES = Tier 3)	NO	_

Emission Units	lb/hr	
Source output capacity	21	MMBTU

#### FOR USER-DEFINED CHEMICALS AND EMISSIONS, FILL IN THE TABLE BELOW

SER DEFINED CHEMIC	CALS AND EMISSIONS			R1 -	Efficiency	R2 -
			<del>,</del>	Uncontrolled	Factor	Controlled
Cmpound Code	Compound	lb/hr	Molecular Weight	lbs/hr	Fraction range 0-	lbs/hr
				0	0.00000	
				0	0.00000	
				0	0.00000	
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# TIER 1 SCREENING RISK ASSESSMENT REPORT

Receptor Distance (actual)
Receptor Distance (for X/Q LOOKUP)

Tier 1 R	1 Results
Cancer/Chronic ASI	Acute ASI
2.49E+00	1.07E-01
FAILED	PASSED

APPLICATION SCREENING INDEX CALCULATION

	_	_	10		_							
Acute Pollutant Screening Index (PSI)	(10.1)	1.06E-01	2.93E-05		9.77E-04					5.35E-06	6.69E-06	1.07E-01
Cancer / Chronic Pollutant Screening Index	6.07E-03	3.04E-02	1.14E-01	1.18E-02	5.06E-02	4.44E-07	7.05E-03	2.27E+00	1.19E-04	5.97E-05	1.90E-05	2.49E+00
Acute Pollutant Screening Level (lbs/hr)		5.09E-04	3.96E+00		2.52E-01					9.91E+01	5.89E+01	
Cancer / Chronic Pollutant Screening Level (lbs/yr)	8 92E+01	1.55E+01	8.92E+00	1.02E+02	4.25E+01	1.81E+06	7.44E+00	7.69E-03	7.75E+05	7.75E+04	1.81E+05	
Max Hourly Emission Rate (Ibs/hr)	6.20E-05	5.40E-05	1.16E-04	1.38E-04	2.46E-04	9.20E-05	6.00E-06	2.00E-06	1.06E-02	5.30E-04	3.94E-04	
Average Annual Emission Rate	5.42E-01	4.72E-01	1.01E+00	1.21E+00	2.15E+00	8.04E-01	5.24E-02	1.75E-02	9.26E+01	4.63E+00	3.44E+00	INDEX)
Compound	Acetaldehyde	Acrolein	Benzene (including benzene from gasoline)	Ethyl benzene	Formaldehyde	Hexane (n-)	Naphthalene	PolyCyclic Aromatic Hydrocarbon (PAHs)	Propylene	Toluene (methyl benzene)	Xylenes (isomers and mixtures)	TOTAL (APPLICATION SCREENING INDEX)

Tier 1 Report

## TIER 2 SCREENING RISK ASSESSMENT REPORT

A/N: Fac:

512274 Providence St. Joseph Med Center

Application deemed complete date: 09/18/10

2. Tier 2 Data MET Factor 6 or 7 hrs

Dispersion Factors tables

For Chronic X/Q For Acute X/Q

Dilution Factors (ug/m3)/(tons/y	ıs/yr)	
Receptor	δ/X	X/Qmax
Residential	0.076356944	0.808284303
Commercial	0.076356944	0.076356944 0.808284303

Adjustment and Intake Factors

AFann         AFann         DBR           Residential         1         302           Worker         1         149				
Residential   302   Worker   1   149	-	AFann	DBR	EVF
Worker 1 149	Residential	I	302	96.0
	Worker	1	149	0.38

Compound   Controlled   Contr										l
5.20E-05   5.20E-05   1.00E-02   1.0000   1.00	Compound	R1 - uncontrolled (lbs/hr)	R2 - controlled (lbs/hr)	CP	MP MICR Resident	MP MICR Worker	MP Chronic Resident	MP Chronic Worker	REL	REL Acute
\$40E-05     \$40E-05     1     1     1     0.06       \$1.16E-04     \$1.06E-04     \$1.00E-03     1     1     1     1     0.06       \$1.16E-04     \$1.06E-04     \$1.00E-03     \$1 <t< td=""><td>Acetaldehyde</td><td>6.20E-05</td><td>6.20E-05</td><td>1.00E-02</td><td>1.0000</td><td></td><td></td><td></td><td>6</td><td></td></t<>	Acetaldehyde	6.20E-05	6.20E-05	1.00E-02	1.0000				6	
1.16E-04   1.10E-04   1.00E-01   1   1   1   1   1   1   1   1   1	Acrolein	5.40E-05	5.40E-05	,				-	90:0	0.19
1.38E-04 1.38E-04 2.10E-02 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.00000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000 1.0000	Benzene (including benzene from gasoline)	1.16E-04	1.16E-04	1.00E-01	1	1	1	1.0000	60	1300
2.46E.04	Ethyl benzene	1.38E-04	1.38E-04	8.70E-03	1	1	1	I	2000	
9 2.0E-05         9 2.0E-05         1,0000         1,0000         1         7000           on (PAHs)         2.00E-06         5.00E-06         3.90E+00         29.76         14.62107209         1         1         9           on (PAHs)         1.06E-02         1.06E-02         1.06E-02         1.0000         1.0000         1         1         3000           5.30E-04         5.30E-04         1         1         1         1         3000         1.0000         1.0000         1.0000         700           3.94E-04         3.94E-04         1         1         1.0000         1.0000         1.0000         700         1.0000	Formaldehyde	2.46E-04	2.46E-04	2.10E-02	1.0000		1	I	3	94
001 (PAHs) 6.00E-d6 6.00E-d6 1.20E-01 1 1 1 9  1.06E-d2 1.00E-d2 3.00E-d0 1.0000 1.0000 1.0000  3.04E-d4 3.94E-d4 1 1 1.0000 1.0000 7700  3.04E-d4 3.94E-d4 1 1 1.0000 1.0000 7700	Hexane (n-)	9.20E-05	9.20E-05		1.0000		1		7000	
on (PAHs)     2 00E-06     3 90E-00     2 076     14 62107209     1     i       1 06E-02     1 06E-02     1 0000     1 0000     1 0000     1 0000       3.30E-04     3 94E-04     1     1 1 0000     1 0000       3.34E-04     3 94E-04     1     1 1 0000     1 0000       3.34E-04     3 94E-04     1     1 1 0000     1 0000       4.00     3 3 94E-04     1     1 1 0000     1 0000       5.30E-04     1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Naphthalene	6.00E-06	6.00E-06	1.20E-01			1	-	6	
1.06E-02	PolyCyclic Aromatic Hydrocarbon (PAHs)	2.00E-06	2.00E-06	3.90E+00	29.76		1			
\$30E-04 \$30E-04 1 1 1 1 300  3.04E-04 3.04E-04 1 1 1.0000 1.0000 700  8.04E-04 3.04E-04 1 1.0000 1.0	Propylene	1,06E-02	1.06E-02		0000'1		1		3000	
3.94E.04 3.94E.04 1 1.0000 1.0000 700	Toluene (methyl benzene)	5.30E-04	5.30E-04				1	-	300	37000
	Xylenes (isomers and mixtures)	3.94E-04	3.94E-04		-	1	1.0000		200	22000
					İ					
					İ					

R2 (lb/vr)   R2 (ton/vr)	0.541632	0.471744	1.013376 0.000506688	1205568 0.000602784	14 2.149056 0.001074528	0.803712	16 0.052416 0.000026208	16 0.017472 0.000008736	12 92.6016 0.0463008	0.00231504	3.441984 0.001720992												
controlled R2 (lb/hr)	6.20E-05	5.40E-05	1.16E-04	1.38E-04	2.46E-04	9,20E-05	90-300.9	2.00E-06	1.06E-02	5.30E-0	3.94E-04	,											
uncontrolled R1 (lb/hr)	6.20E-05	S.40E-05	1.16E-04	1.38E-04	2.46E-04	9.20E-05	6.00E-06	2.00E-06	1.06E-02	5.30E-04	3.94E-04												
4. Emission Calculations	Acetaldehyde	Acrolein.	Benzene (including benzene from gasoline)	Ethyl benzene	Formaldehyde	Hexane (n-)	Naphthalene	PolyCyclic Aromatic Hydrocarbon (PAHs)	Propylene	Toluene (methyl benzene)	Xylenes (isomers and mixtures)												

Application deemed complete date: 09/18/10

TIER 2 RESULTS

5a. MICR MICR = CP (mg/(kg-day))^-1 \* Q (ton/yr) \* (X/Q) \* AFann \* MET \* DBR \* EVF \* 1E-6\* MP

	מוווו ואור ו		Ę
Сотрочна	Kesidentiai	Commercial	
Acetaldehyde	3.84E-11	7.49E-12	
Acrolein			
Benzene (including benzene from gasoline)	7.18E-10	1.40E-10	
Ethyl benzene	7.43E-11		
Formaldehyde	3.20E-10	6.24E-11	
Hexane (n-)			
Naphthalene	4.46E-11		
PolyCyclic Aromatic Hydrocarbon (PAHs)	1.44E-08	1.38E-09	
Propylene			
Toluene (methyl benzene)			
Xylenes (isomers and mixtures)			
	,		
	,		

No Cancer Burden, MICR<1.0E-6

5b. Cancer Burden	ON
X/Q for one-in-a-million:	
Distance (meter)	
Area (km2):	
Population:	•
Cancer Burden:	

1.56E-08 PASS

Total

6. Hazard Index HIA = [Q(Ib/hr) \* (X/Q)max] \* AF / Acute REL HIC = [Q(ton/yr) \* (X/Q) \* MET \* MP] / Chronic REL

1.47E-08   Pass	Target Organs	Acute	Chronic	Acute	Chronic
er) - AL 1.47E-08 Pass Pass - CV Pass Pass Pass Pass Pass Pass Pass Pas	6			Pass/Fail	Pass/Fail
-CV Pass -CV Pass -CV 7.22E-08 8.05E-07 Pass -ID A.13E-04 2.10E-04 Pass -IES 2.32E-04 4.13E-07 Pass -IIIE-08 4.13E-07 Pass -IIIE-08 9.13E-07 Pass	Alimentary system (liver) - AL		1.47E-08	Pass	Pass
-CV 722E-08 8.05E-07 Pass 10D 14TE-08 Pass 10D 14TE-08 Pass 14TE-08 Pass 11TE-08 Pass 14TE-08 Pa	Bones and teeth - BN			Pass	ssed
ID     7,22E-08     8.05E-07     Pass       1.47E-08     Pass     1.47E-08     Pass       - HEM     6.06E-08     4.13E-07     Pass       I     2.18E-06     Pass       I     1.47E-08     Pass       REP     7.22E-08     9.13E-07     Pass       REP     7.22E-08     Pass       ES     2.32E-04     2.12E-04     Pass	Cardiovascular system - CV			Pass	Pass
crine system - END         1.47E-08         Pass           atopoietic system - HEM         6.06E-08         4.13E-07         Pass           nne system - IMM         2.18E-06         4.13E-07         Pass           ey - KID         1.47E-08         Pass           ous system - NS         1.16E-08         9.13E-07         Pass           oductive system - REP         7.22E-08         9.13E-07         Pass           iratory system - RES         2.32E-04         2.12E-04         Pass	Developmental - DEV	7.22E-08	8.05E-07	Pass	Pass
atopoietic system - HEM 6.06E-08 4.13E-07 Pass nine system - IMM 2.18E-06 4.13E-07 Pass cy - KID out system - NS 1.16E-08 9.13E-07 Pass out system - NS 1.16E-08 9.13E-07 Pass out system - NS 1.16E-08 9.13E-07 Pass out system - REP 7.22E-08 Pass ratioty system - RES 2.32E-04 2.12E-04 Pass Pass	Endocrine system - END		1.47E-08	Pass	Pass
atopoietic system - HEM         6.06E-08         4.13E-07         Pass           nne system - IMM         2.18E-06         Pass           ey - KID         1.47E-08         Pass           ous system - NS         1.16E-08         9.13E-07         Pass           oductive system - REP         7.22E-08         Pass           iratory system - RES         2.32E-04         2.12E-04         Pass	Eye	2.32E-04	2.10E-04	Pass	SSE
nne system - IMM         2.18E-06         Pass           ey - KID         1.47E-08         Pass           ous system - NS         1.16E-08         9.13E-07         Pass           oductive system - REP         7.22E-08         Pass           iratory system - RES         2.32E-04         2.12E-04         Pass	Hematopoietic system - HEM	80-390'9	4.13E-07	Pass	Pass
cy - KID       1.47E-08       Pass         ous system - NS       1.16E-08       9.13E-07       Pass         oductive system - REP       7.22E-08       Pass         iratory system - RES       2.32E-04       2.12E-04       Pass         Pass       Pass	Immune system - IMM	2.18E-06		Pass	Pass
ous system - NS         1.16E-08         9.13E-07         Pass           oductive system - REP         7.22E-08         Pass           iratory system - RES         2.32E-04         2.12E-04         Pass           Pass         Pass	Kidney - KID		1.47E-08	Pass	Pass
Oductive system - REP         7.22E-08         Pass           iratory system - RES         2.32E-04         2.12E-04         Pass           Pass         Pass	Nervous system - NS	1.16E-08		Pass	Pass
iratory system - RES 2.32E-04 2.12E-04 Pass Pass	Reproductive system - REP	7.22E-08		Pass	Pass
Pass	Respiratory system - RES	2.32E-04	2.12E-04	Pass	Pass
	Skin			Pass	Pass

6a. Hazard Index Acute		HIA = [Q(lb/hr) * (X/Q)max] *AF/ Acute REL	(X/Q)max] *A	*AF/ Acute REL	1					
Compound	AL	CV	DEV	EYE	НЕМ	IMM	SN	REP	RESP	SKIN
Acetaldehyde Acrolein Benzene (including benzene from gasoline)			6.06E-08	2.30E-04	6.06E-08	6.06E-08		6.06E-08	2.30E-04	
Eury Denzene Formaldehyde Hexane (n-)				2.12E-06		2:12E-06	-		2.12E-06	
Naphthalene PolyCyclic Aromatic Hydrocarbon (PAHs) Pronylene										
Tolune (methyl benzene) Xylenes (isomers and mixtures)			1.16E-08	1.16E-08			1.16E-08	1.16E-08	1.16E-08	
							_			
Total			7.22E-08	2.32E-04	6.06E-08	2.18E-06	1.16E-08	7.22E-08	2.32E-04	

09/18/10

Application deemed complete date:

				HIA - Commercial	cial		•			
Compound	. AL	CV	DEV	EYE	нем	IMM	NS	REP	RESP	SKIN
Actolein Acrolein Benzene (including benzene from gasoline)			80- <del>3</del> 90:9	2.30E-04	80-390.9	6.06E-08		6.06E-08	2.30E-04	
Ethyl benzene Formaldehyde Havong (n.)			_	2.12E-06		2.12E-06			2.12E-06	
Naphthalene PolyCyclic Aromatic Hydrocarbon (PAHs) Propylene										
Toluene (methyl benzene) Xylenes (isomers and mixtures)			1.16E-08	1.16E-08 1.45E-08			1.16E-08	1,16E-08	1.16E-08 1.45E-08	
								,		
Total			7.22E-08	2.32E-04	6.06E-08	2.18E-06	1.16E-08	7.22E-08	2.32E-04	

					HIC - Residential	al			:				
Compound	ΑΓ	BN	CV	DEV	END	EYE	HEM	IMM	KID	SN	REP		SKIN
Acetaldehyde Acrolein Benzene (including benzene from gasoline) Ethyl benzene	1.47E-08			4.13E-07 1.47E-08	1,47E-08	1.92E-04	4.13E-07		1.47E-08	4.13E-07		1.92E-04	_
Formaldehyde Hexane (n-) Naphthalene PolyCyclic Aromatic Hydrocarbon (PAHs) Propylene Toluene (methyl benzene) Xylenes (isomers and mixtures)				3.77E-07		1.75E-05				2.81E-09 3.77E-07		1.75E-05 1.42E-07 7.54E-07 3.77E-07 1.20E-07	
										· · · · · ·			
													<del></del> -
Total	1.47E-08			8.05E-07	1.47E-08	2.10E-04	4.13E-07		1.47E-08	9.13E-07		2.12E-04	

HIC = [Q(ton/yr) \* (X/Q) \* MET \* MP] / Chronic REL

6b. Hazard Index Chronic

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6b. Hazard Index Chronic (cont.)

nplete date: 09/18/10

					HIC - Commercial	ia i					ł		٦
Compound	AL	BN		DEV	END	EYE	HEM	IMM	KID	NS R	REP	RESP SKIN	z
Acetaldehyde Acrolein						1.92E-04						1.47E-06 1.92E-04	
Benzene (including benzene from gasoline)	1.47E-08	·		4.13E-07	1 47E-08		4.13E-07		1 47E-08	4.13E-07			
Formaldehyde						1.75E-05			3	_		1.75E-05	
Hexane (n-)		•	-		-					2.81E-09			
Naphthalene PolyCyclic Aromatic Hydrocarbon (PAHs)												1.42E-07	
Propviene												7.54E-07	
Toluene (methyl benzene)				3.77E-07						3.77E-07		3.77E-07	
Xylenes (isomers and mixtures)									·	1.20E-07		1.20E-07	
Total	1.47E-08			8.05E-07	1.47E-08	2.10E-04	4.13E-07		1.47E-08	9.13E-07		2.12E-04	Π

## **BOILER DATA**

Max burner rating	21,000,000 BTU/hr	BTU/hr
Fuel HHV	1050	1050 btu/ft3
Fuel rate	20,000 ft3/hr	ft3/hr
MM of fuel rate	0.020000 mmcf/hr	mmcf/hr
VOC control (Rule 1401)		percent eff

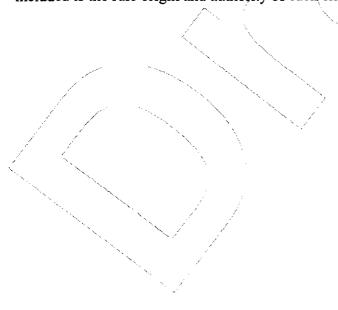
	EF	RI	R2	NSR Data Entry (E-06 lb/hr)	(E-06 lb/hr)
Compound	(lb/mmcf)	(lb/hr)	(lb/hr)	R1	R2
Acetaldehyde	3.10E-03	0.000062	0.000062	62.0000	62.0000
Acrolein	2.70E-03	0.000054	0.000054	54.0000	54.0000
Benzene (including benzene					
from gasoline)	5.80E-03	0.000116	0.000116	116.0000	116.0000
Ethyl benzene	6.90E-03	0.000138	0.000138	138.0000	138.0000
Formaldehyde	1.23E-02	0.000246	0.000246	246.0000	246.0000
Hexane (n-)	4.60E-03	9.20000E-05	9.20000E-05	92.0000	92.0000
Naphthalene	3.00E-04	0.000006	0.000006	00000.9	000009
PolyCyclic Aromatic	1.00E-04	0.000002	0.000002	2.0000	2.0000
Propylene	5.30E-01	0.0106	0.0106	10600.0000	10600:0000
Toluene (methyl benzene)	2.65E-02	0.00053	0.00053	530.0000	530.0000
Xylenes (isomers and mixtures)	1.97E-02	1.97E-02 3.94000E-04	0.000394	394.0000	394.0000

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER



This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

Application number	Permit to Operate number	Equipment description
112249	M34972	ICE (>500 BHP), EM ELECTRICAL GEN, DIESEL
112250	M34973	ICE (>500 BHP), EM ELECTRICAL GEN, DIESEL
112251	M34974	ICE (>500 BHP), EM ELECTRICAL GEN, DIESEL
512274		BOILER, NAT GAS & LPG, > 20=50
223444	D61639	BOILER, NAT GAS & LPG, > 20=50 MMBTU/HR
254785	D45171	ICE (50-500 BHP), EM ELECTRICAL, GEN, DIESEL
276927	D69668	ICE (>500 BHP), EM ELECTRICAL, GEN, DIESEL
416712	F63507	ICE (>500 BHP), EM ELECTRICAL, GEN, DIESEL
C43799	D13392	BAGHOUSE, AMBIENT TEMP. (>100-500 SQ.FT.)

NOTE: EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.

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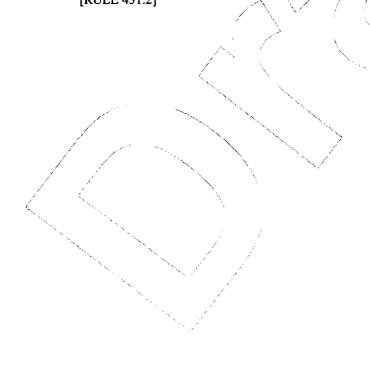
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### **FACILITY WIDE CONDITION(S)**

#### Condition(s):

- 1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
  - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGLEMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
  - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION. [RULE 401]
- THE OPERATOR SHALL ONLY USE DIESEL FUEL WITH A SULFUR CONTENT THAT DOES NOT EXCEED 15 PPM BY WEIGHT, UNLESS THE OPERATOR DEMONSTRATES IN WRITING TO THE EXECUTIVE OFFICER THAT SPECIFIC ADDITIONAL TIME IS NECESSARY.

  [RULE 431.2]



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. M34972 A/N 112249

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, NO. 2, CATERPILLAR, EMERGENCY ELECTRICAL GENERATION, MODEL NO. D398, SERIAL NO. 352773, DIESEL-FUELED, 12 CYLINDERS, TURBOCHARGED, INTERCOOLED, 850 BHP.

#### Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
  [RULE 204]
- 3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE 1110.2, RULE 1304 (a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 1110.2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE.

  [RULE 1304 (a)]

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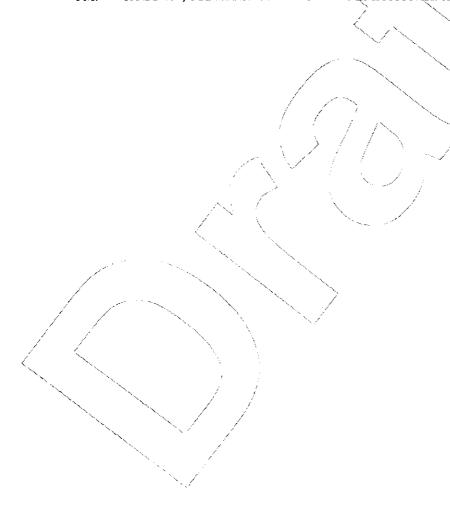
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]

#### **Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR THE EMISSION LIMITS



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. M34973 A/N 112250

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL ALLISON, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 7163-7200, SERIAL NO. 16VA111, TWIN SUPERCHARGED, DIESEL-FUELED, 12 CYLINDERS, 570 BHP.

#### Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

  [RULE 204]
- 3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE 1110.2, RULE 1304 (a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 1110,2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE.

  [RULE 1304 (a)]

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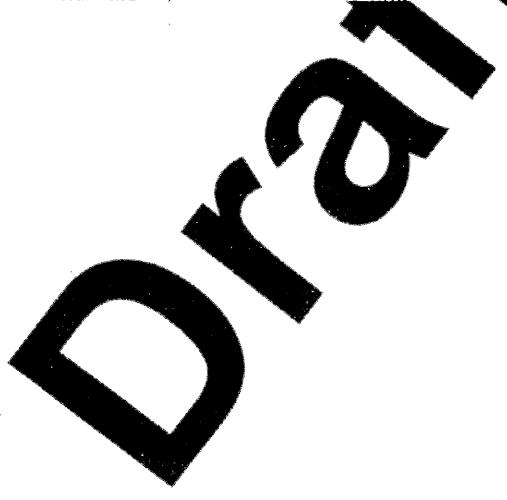
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]

#### **Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR THE EMISSION LIMITS



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. M34974 A/N 112251

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, NO. 1, CATERPILLAR, EMERGENCY ELECTRICAL GENERATION, MODEL NO. D398, SERIAL NO. 66B3234, DIESEL-FUELED, 12 CYLÍNDERS, TÜRBOCHARGED, INTERCOOLED, 850 BHP.

#### Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

  [RULE 204]
- THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE 1110.2, RULE 1304 (a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 1110.2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. [RULE 1304 (a)]

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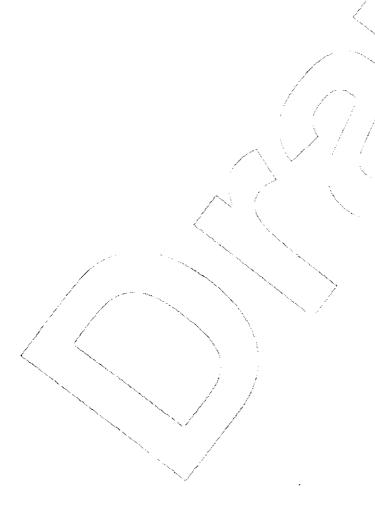
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]

#### **Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR THE EMISSION LIMITS



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. A/N 512274

#### **Equipment Description:**

BOILER, NO. 1, CLEAVER BROOKS, FIRE-TUBE TYPE, MODEL NO. CBW 700-500, SERIAL NO. B015530-91, 21,000,000 BTU PER HOUR, WITH A LOW NOX BURNER, S.T. JOHNSON COMPANY, MODEL NO. NOXMATIC A-TYPE-500, NATURAL GAS OR PROPANE FIRED, AND A 15-HP COMBUSTION AIR BLOWER, 25-HP FORCED FLUE GAS RECIRCULATION SYSTEM.

#### Conditions:

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

  [RULE 204]
- 2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
  [RULE 204]
- 3. THIS BOILER AND BOILER NO. 2 (A/N 223444) SHALL NOT HAVE A COMBINED HEAT INPUT OF MORE THAN 453,600,000 BTU IN ANY ONE DAY.
  [RULE 1303(a) (1)-BACT]
- 4. THE BOILER SHALL BE EQUIPPED WITH A NON-RESETTABLE, TOTALIZING METER FOR EACH FUEL SUPPLIED TO THE BOILER. THE METER MAY BE COMMON WITH BOILER NO. 2 (A/N 223444).

  [RULE 1303(a) (1)-BACT]
- 5. THIS BOILER SHALL EMIT NO MORE THAN 9 PPM, FOR OXIDES OF NITROGEN (NOX) CALCULATED AS NO2, AND 400 PPM OF CARBON MONOXIDE (CO), ALL MEASURED BY VOLUME ON A DRY BASIS AT 3% OXYGEN WHEN FIRING ON NATURAL GAS.

  [RULE 1146]
- 6. THE OWNER OR OPERATOR OF THIS BOILER SHALL ARRANGE FOR A CERTIFIED BOILER TECHNICIAN TO PERFORM TWICE YEARLY BOILER TUNE-UPS IN ACCORDANCE WITH ATTACHMENT 1 OF RULE 1146. THE BOILER TUNE-UP RECORDS SHALL BE MAINTAINED FOR A PERIOD OF AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

  [RULE 1146]
- 7. THE OWNER OR OPERATOR OF THIS BOILER SHALL MAINTAIN ALL BOILER TUNE-UP RECORDS, AS SPECIFIED IN CONDITION 6 ABOVE FOR A PERIOD OF AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

  [RULE 1146]

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

- 8. THIS BOILER SHALL BE FIRED WITH NATURAL GAS OR PROPANE ONLY.
  [RULE 1303(a) (1)-BACT]
- 9. THIS BOILER SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1146 [RULE 1146]
- 10. THE OWNER OF OPERATOR OF THE EQUIPMENT SHALL CONDUCT A SOURCE TEST UNDER THE FOLLOWING CONDITIONS:
  - A. SOURCE TESTING SHALL BE CONDUCTED WITHIN 30 DAYS AFTER ACHIEVING MAXIMUM PRODUCTION RATE AT WHICH THE EQUIPMENT WILL BE OPERATED, BUT NO LATER THAN 90 DAYS AFTER INITIAL START-UP.
  - B. THE SOURCE TEST SHALL BE DONE TO VERIFY COMPLIANCE PERMIT CONDITION NO. 5.
  - C. THE SOURCE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH SCAQMD METHOD 100.1.
  - D. THE TEST SHALL BE CONDUCTED FOR 15 MINUTES EACH WHILE FIRING AT MAXIMUM, MINIMUM, AVERAGE AND NORMAL FIRING LOAD.
  - E. TWO COMPLETE COPIES OF SOURCE TEST REPORTS (INCLUDE THE APPLICATION NUMBER AND A COPY OF THE PERMIT IN THE REPORT) SHALL BE SUBMITTED TO THE DISTRICT (ADDRESSED TO SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, ATTN: FRANCISCO ESCOBAR, P.O. BOX 4941, DIAMOND BAR, CA 91765).
    - THE RESULTS IN WRITING SHALL BE SUBMITTED WITHIN 45 DAYS AFTER THE SOURCE TEST IS COMPLETED. IT SHALL INCLUDE, BUT NOT LIMITED TO EMISSIONS RATE IN POUNDS PER HOUR AND CONCENTRATION IN PPMV AT THE OUTLET OF THE BOILER.
  - F. A TESTING LABORATORY CERTIFIED BY THE CALIFORNIA AIR RESOURCES BOARD IN THE REQUIRED TEST METHODS FOR CRITERIA POLLUTANT TO BE MEASURED, AND IN COMPLIANCE WITH DISTRICT RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THE TEST.
  - G. SAMPLING FACILITIES SHALL COMPLY WITH THE ATTACHED AQMD "GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES", PURSUANT TO RULE 217. [RULE 3004 (a)(4)]

#### Periodic Monitoring:

11. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.

[RULE 3004 (a)(4)]

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

12. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD.. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDINE REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.

[RULE 3004 (a)(4)]

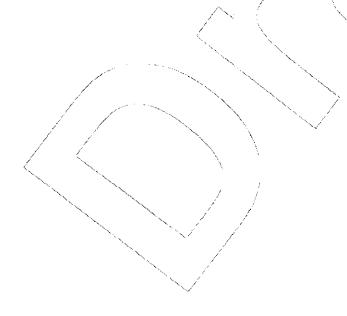
#### **Emissions And Requirements:**

13. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NOx: 30 PPMV, RULE 1146

NOx: 9 PPMV, RULE 1146 by 1/1/2012

CO: 400 PPMV, RULE 1146 CO: 2000 PPMV, RULE 407 PM: 0.1 GR/SCF, RULE 409



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. D61639 A/N 223444

#### **Equipment Description:**

BOILER, NO. 2, CLEAVER BROOKS, FIRE-TUBE TYPE, MODEL CBW 700-500, 21,000,000 BTÚ PER HOUR, WITH A CLEAVER BROOKS NATURAL GAS OR PROPANE FIRED BURNER, AND A 15-HP COMBUSTION AIR BLOWER, 25-HP FORCED FLUE GAS RECIRCULATION SYSTEM AND OXYGEN TRIM.

#### Conditions:

- 1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

  [RULE 204]
- 2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
  [RULE 204]
- 3. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER STACK GAS EXHAUST TEMPERATURE EXCEEDS 195 DEGREES FAHRENHEIT.

  [RULE 1146]
- 4. A MEASURING DEVICE SHALL BE MAINTAINED TO ACCURATELY MEASURE THE BOILER STACK GAS EXHAUST TEMPERATURE.

  [RULE 1146]
- 5. THIS BOILER AND BOILER NO. 1 (A/N 223443) SHALL NOT HAVE A COMBINED HEAT INPUT OF MORE THAN 453,600,000 BTU IN ANY ONE DAY.

  [RULE 1303(a) (1)-BACT]
- 6. THE BOILER SHALL BE EQUIPPED WITH A NON-RESETTABLE, TOTALIZING METER FOR EACH FUEL SUPPLIED TO THE BOILER. THE METER MAY BE COMMON WITH BOILER NO. 1 (A/N 223443).

  [RULE 1303(a) (1)-BACT]
- 7. THIS BOILER SHALL BE FIRED WITH NATURAL GAS OR PROPANE ONLY. [RULE 1303(a) (1)-BACT]
- 8. THIS BOILER SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1146 [RULE 1146]

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

9. THE OWNER OR OPERATOR OF THIS BOILER SHALL ARRANGE FOR A CERTIFIED BOILER TECHNICIAN TO PERFORM TWICE YEARLY BOILER TUNE-UPS IN ACCORDANCE WITH ATTACHMENT 1 OF RULE 1146. THE BOILER TUNE-UP RECORDS SHALL BE MAINTAINED FOR A PERIOD OF AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 1146]

10. THE OWNER OR OPERATOR OF THIS BOILER SHALL MAINTAIN ALL BOILER TUNE-UP RECORDS, AS SPECIFIED IN CONDITION 9 ABOVE FOR A PERIOD OF AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 1146]

#### Periodic Monitoring:

- 11. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 7.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORD REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.

  [RULE 3004 (a)(4)]
- 12. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) EITHER BY:
  (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD
  100:1 OR 10.1; OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE
  ANALYZER AND AQMD-APPROVED TEST METHOD.. THE TEST SHALL BE CONDUCTED WHEN
  THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE
  COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH
  ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E
  AND K OF THIS PERMIT.

[RULE 3004 (a)(4)]

#### **Emissions And Requirements:**

13. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NOx: 30 PPMV, RULES 1146 & 1303 (a)(1) - BACT

CO: 400 PPMV, RULE 1146 CO: 2000 PPMV, RULE 407 PM: 0.1 GR/SCF, RULE 409

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FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. D45171 A/N 254785

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 3406 BTA, DIESEL-FUELED, 6 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 439 BHP.

#### **Conditions:**

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
  [RULE 204]
- 3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE 1110.2, RULE 1304 (a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 1110.2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE.

  [RULE 1304 (a)]

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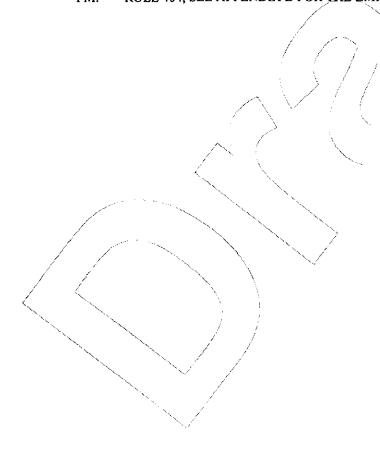
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

- 7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]
- 8. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 4 DEGREES RETARDED RELATIVE TO STANDARD TIMING.
  [RULE 1110.2]

#### **Emissions And Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR THE EMISSION LIMITS



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. D69668 A/N 276927

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 3512, SERIAL NO. 24203833, DIESEL-FUELED, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 1,786 BHP.

#### Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

  [RULE 204]
- THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

  [RULE 204]
- THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE 1110.2, RULE 1304 (a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 1110.2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE.

  [RULE 1304 (a)]

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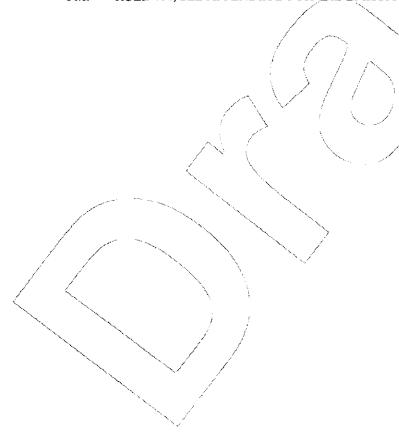
#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

- 7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]
- 8. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 4 DEGREES RETARDED RELATIVE TO STANDARD TIMING.
  [RULE 1110.2]

#### **Emissions And Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:





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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. F63507 A/N 416712

#### **Equipment Description:**

INTERNAL COMBUSTION ENGINE, CATERPILLAR, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 3516B, DIESEL-FUELED, 16 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 2,499 BHP.

#### **Conditions:**

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
  [RULE 204]
- THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.

  [RULE 1110.2, RULE 1304 (a), RULE 1470]
- 4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.

  [RULE-1110.2, RULE 1304(a)]
- AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF TWO CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDE HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR. [RULE 110.2, RULE 1304 (a)]
- 6. OPERATION OF THE ENGINE BEYOND THE 30 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE.

  [RULE 1304 (a)]

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

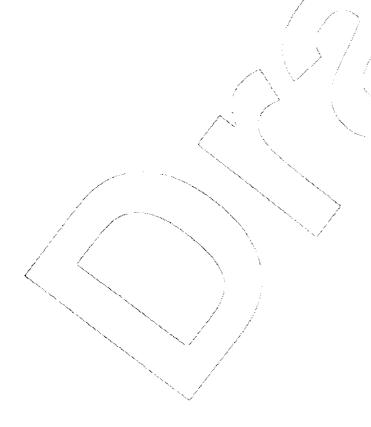
7. THE ENGINE SHALL MEET ALL APPLICABLE REQUIREMENTS OF RULE 1470. [RULE 1470]

#### **Emissions And Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR THE EMISSION LIMITS

VOC: 1.0 GM/BHP-HR, RULE 1303 (a)(1) – BACT NOX: 6.9 GM/BHP-HR, RULE 1303 (a)(1) – BACT CO: 8.5 GM/BHP-HR, RULE 1303 (a)(1) – BACT PM: 0.4 GM/BHP-HR, RULE 1303 (a)(1) – BACT



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### PERMIT TO OPERATE

Permit No. D13392 A/N C43799

#### **Equipment Description:**

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

- 1. BAGHOUSE, MICRO-PULSAIRE, TYPE 97-8 220, SERÍAL NO. 72H1549 WITH A 1/2 H.P. DRIVE MOTOR AND A BOTTOM DISCHARGE HOPPER WASH UNIT.
- 2. EXHAUST SYSTEM WITH A 150 H.P. BLOWER VENTING A PNEUMATIC TRASH COLLECTION SYSTEM CYCLONE SEPARATOR.

#### Conditions:

- OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
  [RULE 204]
- 2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

  [RULE 204]
- 3. A MECHANICAL GAUGE SHALL BE MAINTAINED SO AS TO INDICATE, IN INCHES WATER COLUMN (W.C), THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.

  [RULE 404]
- 4. THE CLOTH FILTER BAGS MUST BE CLEANED WHEN THE PRESSURE DROP ACROSS THE BAGS REACHES 3.5" W.C. [RULE 404]

#### Periodic Monitoring:

5. THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.
[RULE 3004(a) (4)]

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6. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM THE EQUIPMENT AT ALL POTENTIAL POINTS WHERE PARTICULATE EMISSIONS MAY BE RELEASED, WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON AN ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE ANNUAL PERIOD. THE ROUTINE ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.

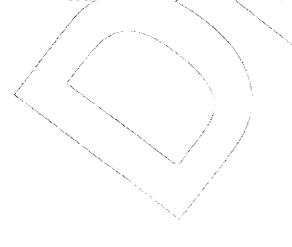
THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED. [RULE 3004 (a) (4)]

#### **Emissions And Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS



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#### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

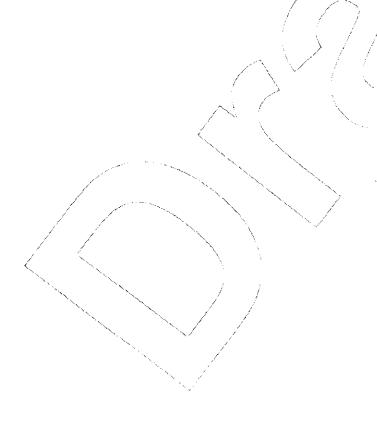
RULE 219 EXEMPT EQUIPMENT, PRINTING EQUIPMENT, LOW USE OR EMISSIONS

#### **Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1130, SEE APPENDIX B FOR EMISSION LIMITS VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 109



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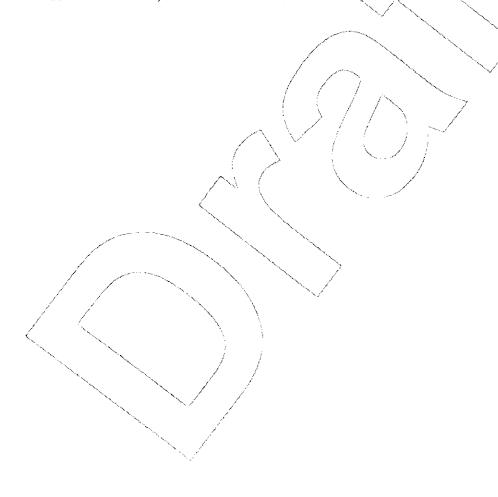
#### **RULE 219 EQUIPMENT**

RULE 219 EXEMPT EQUIPMENT, WELDING, BRAZING, AND SOLDERING EQUIPMENT.

#### **Emissions And Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### **RULE 219 EQUIPMENT**

## Equipment Description: RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT Emissions And Requirements: 1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS: HALON: RULE 1418

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# RULE 219 EQUIPMENT Equipment Description: RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS Emissions And Requirements: 1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS: CR\*6: RULE 1404

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#### FACILITY PERMIT TO OPERATE PROVIDENCE SAINT JOSEPH MEDICAL CENTER

#### **RULE 219 EQUIPMENT**

#### **Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

#### Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING. [RULE 3004 (a) (4)]

#### Emissions And Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS